

CLAIMS

1. A multi-purpose land mine and unexploded shell clearing vehicle comprising:

5 a multi-joint link mounted to the vehicle having a vehicle body that is capable of rotating 360 degrees, the multi-joint link having a predetermined length and being capable of moving forward and backward, from side to side, and upward and downward by hydraulic pressure supplied from a hydraulic pressure generating unit;

10 a grip part attached to a front end of the multi-joint link, the grip part being configured such that one side portion of the grip part and the other side portion of the grip part are moved toward each other by the supplied hydraulic pressure to selectively perform any one of tree gripping and land mine removal;

a land mine removing means attachable to the front end of the multi-joint link instead of the grip part for performing land mine removal;

15 a first hydraulic cylinder having one end connected to a predetermined position of the vehicle body such that the first hydraulic cylinder can be rotated not only in a vertical direction but also in a horizontal direction, the first hydraulic cylinder being configured such that the first hydraulic cylinder can be advanced and retracted by a predetermined length;

20 a circular saw rotatably attached to a front end of a first piston rod of the first hydraulic cylinder for cutting a predetermined lower end position of a tree;

a circular saw-turning means for turning the circular saw attached to the first piston rod such that the circular saw can be turned from one side of the first piston rod to the other side of the first piston rod to cut the tree; and

25 a land mine detector mounted to a fixing bracket attached to the front end of the first piston rod while being arranged opposite to the circular saw for detecting a land mine laid in the ground after the tree is cut.

2. The vehicle as set forth in claim 1, further comprising:

30 a grass cutter rotatably attached to the front end of the first piston rod of the first hydraulic cylinder, instead of the circular saw, for cutting weeds or brush.

3. The vehicle as set forth in claim 1, further comprising:

a bucket attached to the front end of the first piston rod of the first hydraulic cylinder, instead of the circular saw, for allowing a worker riding in the bucket to perform tree removal and land mine detection.

5 4. The vehicle as set forth in claim 1, wherein the land mine removing means is a high-pressure injector for injecting high-pressure air or high-pressure water into the ground such that the land mine laid in the ground is exposed.

10 5. The vehicle as set forth in claim 1, wherein the land mine removing means is an antipersonnel land mine crusher for repeatedly striking the ground where the land mine is laid with a predetermined load to explode the land mine.

6. The vehicle as set forth in claim 1, wherein the land mine removing means is a land mine crushing roller for pressing the ground where the land mine is laid with a predetermined load to explode the land mine.

15 7. The vehicle as set forth in claim 1, wherein the land mine removing means is a magnetic adsorber for adsorbing and collecting metal debris of the exploded land mine by a magnetic force.

20 8. The vehicle as set forth in claim 1, wherein the land mine removing means is a land mine-collecting vibratory scraping bucket, having scrapers arranged while being spaced a predetermined distance from each other such that an M14 antipersonnel land mine does not pass through the space between the respective scrapers and a vibrating unit mounted thereto, for digging the ground where the land mine is laid to a predetermined depth and then allowing the soil to fall through the spaces between the scrapers through the vibrating operation of the vibrating unit to collect the land mine.